

REMARKS

Reconsideration and withdrawal of the rejections set forth in the above-mentioned Official Action in view of the foregoing amendments and the following remarks are respectfully requested.

Claims 1, 6, 9 and 10 are now pending in the application, with Claims 1 and 10 being independent. Claims 2-5, 11 and 12 have been cancelled without prejudice. Claims 1 and 10 have been amended herein.

Claims 1, 6, 9 and 10 were rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 6,079,809 (Yaegashi et al.). Although the Office Action refers to U.S. Patent No. 6,257,696 (Nakamura), in a telephone conversation with the Examiner on November 21, 2005, it was confirmed that the rejection was based on Yaegashi et al. This rejection is respectfully traversed.

As is recited in independent Claim 1, the present invention relates to an ink jet printing apparatus that forms an image by ejecting ink from a print head, in which a plurality of ejecting portion rows are arranged, to a print medium, each of the ejecting portion rows having a plurality of ejecting portions arranged therein. The apparatus includes a carriage and preliminary ejecting means. The carriage scans the print head. The preliminary ejecting means ejects the ink from the ejecting portions in the print head such that the ejection is not involved in formation of the image. The ejecting portion rows are arranged in a scanning direction of the carriage, the ejecting portions are arranged in each row in a direction transverse to the scanning direction, the preliminary ejecting means

sequentially selects one of the plurality of ejecting portion rows as an ejecting portion row on which an ejecting operation is performed, while the carriage is not performing a scanning operation, and the preliminary ejecting means then subjects the selected ejecting portion row to preliminary ejection, and in the preliminary ejection for the selected ejecting portion row, the ejection, which is not involved in formation of the image, is carried out for all the ejecting portions arranged in the selected ejecting portion row.

As is recited in independent Claim 10, the present invention relates to a preliminary ejecting method executed using an ink jet printing apparatus that forms an image by ejecting ink from a print head, in which a plurality of ejecting portion rows are arranged, to a print medium. Each of the ejecting portion rows has a plurality of ejecting portions arranged therein, the ink is ejected from the ejecting portions in the print head such that the ejection is not involved in formation of the image, and the print head is mounted on a carriage for conveying the print head. The method includes a step of sequentially selecting one of the plurality of ejecting portion rows as an ejecting portion row on which an ejecting operation is performed and then subjecting the selected ejecting portion row to preliminary ejection. In the preliminary ejection for the selected ejecting portion row, the ejection, which is not involved in formation of the image, is carried out for all the ejecting portions arranged in the selected ejecting portion row. The ejecting portion rows are arranged in a scanning direction of the carriage and the ejecting portions are arranged in each row in a direction transverse to the scanning direction.

Yaegashi et al. relates to an ink jet recording apparatus with a system for recovering a recording head. As shown in Figure 5, the recording head includes plural nozzles in arrays of various colors aligned in a single line. Figures 12 and 13 show a different recording head, but again the ejection openings are aligned in a single line. To clean the recording head, steps of capping, suction, wiping and preliminary discharge are performed. In one embodiment, a sequence of performing preliminary discharge of 1) all the nozzles of an array, 2) just the end nozzles, 3) all the nozzles, 4) the end nozzles, and 5) all the nozzles is performed for each of the color arrays. Alternatively, preliminary ejection of the black array can be performed separately from the other color arrays. In another embodiment, the pressure in an ink tank corresponding to each color array is determined and the inks are predischarged sequentially from the array having one extreme pressure to the array having the other extreme pressure.

However, Yaegashi et al. does not disclose or suggest that ejecting portion rows are arranged in a scanning direction of carriage, as is recited in independent Claims 1 and 10. That is, in Yaegashi et al. although ejection portions may be arranged in each row in a direction transverse to the scanning direction, the rows are arranged in that same transverse direction, not in the scanning direction. Moreover, Yaegashi et al. does not disclose or suggest that in the preliminary ejection for the selected ejecting portion row, the ejection is carried out for all the ejecting portions arranged in the selected ejecting portion row, as is also recited in independent Claims 1 and 10. Rather, in Yaegashi et al., during certain ejections, only the end nozzles of each array are ejected.

Thus, Yaegashi et al. fails to disclose or suggest important features of the present invention recited in independent Claims 1 and 10.

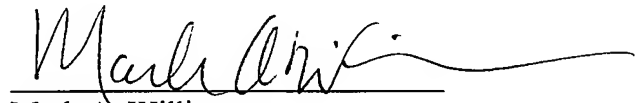
Accordingly, independent Claims 1 and 10 are patentable over the citations of record. Reconsideration and withdrawal of the §§ 102 and 103 rejections are respectfully requested.

For the foregoing reasons, Applicants respectfully submit that the present invention is patentably defined by independent Claims 1 and 10. Dependent Claims 6 and 9 are also allowable, in their own right, for defining features of the present invention in addition to those recited in independent Claim 1. Individual consideration of these dependent claims is requested.

Applicants submit that the present application is in condition for allowance. Favorable reconsideration, withdrawal of the rejection set forth in the above-noted Office Action, and an early Notice of Allowability are requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Mark A. Williamson", written over a horizontal line.

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